

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Bex 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/772,421	01/30/2001	Benjamin Sonnenreich	K&S-101US	K&S-101US 9774	
23122	7590 07:/08/2003				
RATNERPR			EXAMI	NER	
P O BOX 980 VALLEY FORGE, PA 19482-0980			TRAN,	TRAN, LEN	
			ART UNIT	PAPER NUMBER	
	•		1725	21	
			DATE MAILED: 07/08/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

•	_	_	# S 2				
•		Applicati n N .	Applicant(s)				
Office Action Summary		09/772,421	SONNENREICH ET AL.				
		Examiner	Art Unit				
		Len Tran	1725				
Period fo	 The MAILING DATE of this communication apport Reply 	ears on the cover sheet with the c	correspondence address				
THE I - Exter after - If the - If NC - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).				
1)⊠	Responsive to communication(s) filed on 12 J	<u>lune 2003</u> .					
2a) <u></u> ☐	This action is FINAL . 2b) Th	is action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims	Ex parte Quayle, 1900 C.D. 11, -	100 0.0. 210.				
4)⊠	Claim(s) <u>1-5,7-10,12-16 and 28</u> is/are pending	in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	5) Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-5,7-10,12-16 and 28</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
•	Claim(s) are subject to restriction and/o	r election requirement.					
	ion Papers						
•	The specification is objected to by the Examine						
10)	The drawing(s) filed on is/are: a)☐ accept						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner.							
•	under 35 U.S.C. §§ 119 and 120	armioi.					
_		n priority under 35 H S C & 110/s	a), (d) or (f)				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
a)		s have been received					
	 Certified copies of the priority documents Certified copies of the priority documents 		ion No				
	3. Copies of the certified copies of the prior						
* 9	application from the International Bu See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	-				
14)[] A	Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(e) (to a provisional application).				
) The translation of the foreign language pro Acknowledgment is made of a claim for domesti						
Attachmen							
2) Notic	ce of References Cited (PTO-892) fee of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
.S. Patent and T	rademark Office						

Art Unit: 1725

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-5, 7-9, 12-16, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (figure 1a and 1b), and further in view of Haefling et al (US '854).

Art Unit: 1725

Applicant's admitted prior art in figure 1a and 1b discloses a bonding tool for bonding a wire to a substrate having an orifice extending along a longitudinal axis of the body and the working tip and having a conical portion adjacent the working tip.

Applicant's admitted prior art fails to teach an orifice along a longitudinal body, a polymer, non conductive, coating disposed over at least a portion of a surface of the orifice, wherein the coating extends along an entire length of the orifice, or the exterior surface of the tip, or the body of the tip. The coating is substantially uniform in thickness and the body of the tool is substantially cylindrical.

However, Haefling et al disclose an orifice along a longitudinal body, a polymer, non conductive, coating disposed over at least a portion of a surface of the orifice, wherein the coating extends along an entire length of the orifice, or the exterior surface of the tip, or the body of the tip. The coating is substantially uniform in thickness and the body of the tool is substantially cylindrical (col. 3, lines 15-30, lines 55-63). Haefling et al disclose the above differences for the purpose of preventing arcing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide the above differences taught by Haefling et al, in Applicant's admitted prior art in order to prevent arcing.

Haefling et al disclose the claimed invention, but fail to teach the polymer being a polyolefin or a parylene. However, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have either polyolefine or parylene, since it has been held to be within the general skill of a worker in the art to select a known material on the

Art Unit: 1725

basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (figure 1a and 1b), and further in view of Hadar et al (US 6,171,456).

Applicant's admitted prior art discloses the claimed invention above in paragraph 3, but fail to teach a coating disposed on the surface thereof, and that the coating is about 2 microns thick.

Hadar et al disclose a bonding tool having a body, working tip, and an orifice. The orifice has a coating disposed on the surface thereof, and that the coating is about 2 microns thick (col. 3, lines 58-65, and figure 4) for the purpose of preventing distortion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide about 2 microns thick coating as taught by Hadar et al, in Applicant's admitted prior art in order to prevent distortion.

Response to Arguments

5. Applicant's arguments with respect to claims 1-5, 7-10, 12-16, 28 have been considered but are most in view of the new ground(s) of rejection.

Art Unit: 1725

Inquiry

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Len Tran whose telephone number is (703)605-1175. The

examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the

organization where this application or proceeding is assigned are (703)305-3602 for regular

communications and (703)305-3602 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)308-0661.

Len Tran Examiner

Art Unit 1725

LT

July 2, 2003

M. ALEXANDRA ELVE

Page 5

PRIMARY EXAMINER